

# NOAA'S

## CORAL REEF PROGRAM

**HIDDEN** beneath the ocean waters, coral reefs teem with an astounding array of life and are nature's most diverse marine ecosystem. Fish, corals, lobsters, clams, seahorses, sponges, seals, and sea turtles are only a few of the creatures supported by the reef structure. We continue to discover the diversity of the coral reef ecosystem. More than just pretty pictures, coral reef ecosystems benefit millions of people. They... provide food and income through commercial and subsistence fisheries and jobs in tourism and recreation... hold new life saving medicines... protect vulnerable shorelines from wave action... and sustain cultural traditions of native people living near reefs.

**CORAL REEF ECOSYSTEMS** have survived millions of years of natural disturbances such as tropical storms, floods, climate change, and disease. Today, these natural stresses are compounded by impacts from human activities, causing a rapid decline in coral reef ecosystem health.

Approximately 11% of the world's coral reefs have been destroyed, and an additional 16% have severe damage. Without major action to reduce or eliminate impacts such as pollution, overfishing, vessel groundings, climate change, and disease, experts estimate that 60% of the world's coral reefs could be lost by 2030 (*Status of Coral Reefs of the World 2000*).

## NOAA's Commitment to Coral Reef Conservation

NOAA, as steward of U.S. marine resources and a co-chair of the U.S. Coral Reef Task Force (USCRTF), has both the responsibility and unique scientific and management capabilities needed to help reduce the threats facing coral reef ecosystems.

The NOAA Coral Reef Program works with scientific, private, government and non-government partners, from local to international scales to conserve coral reef ecosystems. From mapping and monitoring, to managing reef resources and removing harmful debris, the NOAA Coral Reef Program addresses the priorities laid out in the National Action Plan to Conserve Coral Reefs. The National Action Plan is thenation's blueprint for coral reef conservation and was developed by USCRTF members and constituents.

## Mapping

Coral reef maps provide basic information about coral reef ecosystems. Scientists and managers use these maps to design research and management plans, assess damaged coral, monitor reef health, and evaluate the results of their work.

As part of the Coral Reef Program, NOAA, with its many partners, is applying a variety of technologies to map all U.S. shallow water coral reef ecosystems and some deep reef areas by 2007.

## Monitoring and Research

Monitoring and research help managers diagnose reef problems, prioritize and implement solutions, evaluate the results of management decisions, and forecast future conditions. The NOAA Coral Reef Program is contributing to the national effort to build an integrated coral reef monitoring system. The system will profile and track the health of U.S. coral reefs and measure the effectiveness of management actions. NOAA also supports, through its laboratories and grant programs, research about coral reef ecosystems and human impacts on those systems.

outreach informs and trains managers, researchers, teachers, and private citizens, enabling them to conserve coral reef ecosystems.

## Coral Reefs — A Global Crisis

Coral reefs provide valuable benefits to millions of people worldwide. Without major action to reduce and eliminate human impacts, experts estimate that 60% of the world's coral reefs could be lost by 2030 (*Status of Coral Reefs of the World 2000*).

Human impacts on coral reef ecosystems reach far beyond political boundaries. Protecting them requires regional collaboration. NOAA works with international partners and participates in the International Coral Reef Initiative (ICRI) and the Global Coral Reef Monitoring Network (GCRMN) to strengthen conservation efforts and reduce threats to coral reef ecosystems.



## Management and Conservation

The NOAA Coral Reef Program works with states, territories, and other partners to respond to immediate threats and implement long-term strategies to manage and conserve coral reefs. These include actions such as removing marine debris, planning for and responding to oil and chemical spills, ensuring sustainable coral reef fisheries, effectively managing U.S. National Marine Sanctuaries, and restoring damaged reef ecosystems.

## For more information...

...about the NOAA Coral Reef Conservation Program, visit our website:

[www.coralreef.noaa.gov](http://www.coralreef.noaa.gov)

...about the U.S. Coral Reef Task Force and the National Action Plan is available at:

[www.coralreef.gov](http://www.coralreef.gov)

## Outreach

A key element of coral reef protection is a strong outreach effort. Effective outreach requires reliable access to, and efficient sharing of information. NOAA coral reef



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